cautery scissors when suitable. It is an admirable instrument in the majority of cases of lingual cancer where the disease is not too extensive. He never uses a ligature through the tongue. The tongue is held by toothed forceps, and just as the ranine arteries are about to be severed the hot blade is allowed to cool a little, in order to allow the arteries to bleed; they are then secured and ligated. Frequent sprays are the best antiseptics.

The Resection of the Liver.—AUVRAY (*Rev. de Chir.*, 1897, No. 4) has conducted a study of the possibilities of resection of the liver in the human being on animals that leads him to conclude that the procedure is applicable, in the living, to the ablation of tumors and cysts situated in the parenchyma of the liver, so long as they are not placed too deeply in the abdomen; that is, if they, for example, are situated in the left lobe or on the costal margins.

The method consists in passing through and through the parenchyma of the liver, outside of the line of resection, two interlooped sutures, which are so arranged that the various loops formed by each include and ligate the vessels of definite portions of the parenchyma in a continuous series.

Osteoplastic Closure of Bone-cavities.—OLIER (*Rev. de Chir.*, 1897, No. 4) speaks of the great difficulty experienced in the healing of wounds and the filling in of cavities produced by the removal of diseased spongy tissues from bones, especially the long bones, and, after studying the divers phases of the question, comes to the following conclusions:

1. Cavities in bones, whether abnormal, accidental, pathological, or following operations, fill up slowly, especially when they are deep, on account of the rigidity of their walls, which do not retract. They cannot be filled by the granulations of medullary origin which form on their walls, at least when the subjects are not young and in a plastic condition. In tuberculous cases the difficulty is always very great.

2. In the long bones, as the tibia, after removal of the medullary substance, the repair is so tedious that it seems almost impossible to heal them. Of the short bones, the calcaneum is especially exposed to this slow repair where it has been reduced to but a thin wall.

3. The method to employ in healing these cavities is to remove or make movable one of the walls to permit, in the first case, the periosteum to reach the opposite wall, and, in the second, to place the osseous walls in contact.

4. When one of the bony walls is removed, the corresponding periosteum and soft tissues which cover it are pressed into the centre of the cavity and come in contact with the opposite wall. The strength of the bone is momentarily decreased by this procedure, but the formation of osseous tissue on the inner surface of the periosteum finally gives the necessary solidity. This is particularly true in cases of hypertrophy of the bone from osteomyelitis.

5. Outside of these cases, where hypertrophy has taken place it is better not to sacrifice the bone, but to form a flap which shall, according to the case, approach or be fixed to the opposite wall by metallic sutures. As soon as

the flap has been detached the cicatrization of the wound may be left to the granulations, for while they are without effect upon rigid walls, they act through the cicatricial contraction upon the movable wall. This release of one wall may be effected in many cases at the time the bone is operated upon and the cavity cleared. This precaution prevents the necessity of a secondary intervention.

6. The lateral flap is the easiest and most generally applicable. Many forms of flaps may be required, as cases differ. One may have recourse to flaps taken from other parts of the same bone or from neighboring bones, and changed by gliding or by partial torsion of the periosteal pedicle. This flap should always remain connected with the bone from which it was removed by periosteum and the soft parts, and as well nourished as possible to lessen the chances of necrosis of the flap. Where the bone is superficial the flap should be, as far as possible, osteocutaneous.

7. Bone-grafts, homoplastic or heteroplastic, may be employed, but only exceptionally, where the means to repair the loss of bone-substance cannot be found in the bone itself or any of the adjacent bones.

8. In certain cases where the cavities are intraosseous, with very thin walls in an atonic condition, it is best to proceed immediately to a resection of their entire thickness or to the total ablation of the bone, if it is a bone which is but of secondary importance to the solidity of the part.

The Cure of Tuberculous Peritonitis by Laparotomy.—A carefully conducted series of experiments for the purpose of studying the retrograde histological changes accompanying tuberculous peritonitis and laparotomy for its cure leads GATTI (*Archiv für klin. Chir.*, Band liii. Heft 4) to the following conclusions:

There are three stages observable in guinea-pigs, rabbits, and dogs—the fibrous, the præ-caseating, and the caseating—corresponding to the miliary, diffuse, and nodular forms of tuberculous peritonitis.

The operative procedure is without effect when it is undertaken too early —*i.e.*, before the tubercle has reached its complete histological development. If the operation is performed in a case of advanced disease, it may have no action upon the local disease, or, if it does, the animal may die from some other manifestation which has not been influenced by the interference.

A second laparotomy may be effective where the first is not, showing that it is often advisable to repeat the operation.

The simple laparotomy produces a bettering in the majority of cases, very frequently a macroscopic, and in a certain number of cases a histological, cure of the tuberculous peritonitis. This shows that a macroscopic, histologic, and biologic cure of tuberculous peritonitis is possible.

The histological healing takes place some months after the clinical recovery and the disappearance of macroscopic evidences. The complete healing-process extends over a period varying from six to eight months.

Fibrous tuberculosis disappears, both macro- and microscopically, after a simple laparotomy. The caseous variety is very much less influenced by operation. Often the development is slower; often retarded and made harmless. A disappearance of the caseating masses by resorption does not